

## **EFFICIENT WATER FILTERS**

### **ABSTRACT OF THE DISCLOSURE**

Water treatment devices that include filtration media with specified grain size distributions are provided. In one arrangement, the device contains a volume of grains such that between about 1 and 15 vol % of the grains have a grain size in a range between a first grain size and a second grain size, a first portion of the grains have grain sizes smaller than the first grain size, and a second portion of the grains have grain sizes larger than the second grain size. The first grain size can be between about 50 and 100  $\mu\text{m}$  and the second grain size can be between about 100 and 150  $\mu\text{m}$ . In other arrangements, the first grain size can be between about 70 and 90  $\mu\text{m}$  and the second grain size can be between about 100 and 130  $\mu\text{m}$ . The difference between the first grain size and the second grain size can be at least 20  $\mu\text{m}$ . In other arrangements, the difference between the first grain size and the second grain size can be at least 10  $\mu\text{m}$ .